

The Concepts of Phonology and Stress Marking

Shivaji Sargar: Mahatma Phule College, Panvel

Abstract

Studying and mastering English language is a dream of many Indian students. They are usually seen attending various courses, both traditional and crash, to fulfill their ambition of mastering the English language. It is so because of the social prestige English has got in Indian society and its use in almost all the fields of Indian life. That is why the first part of this paper aims to study the phonological aspects of language in general and the second part deals with the concept of stress marking as it is very important for the second language learners to know how to pronounce the words and sentences in English so that they can be understood by the others.

Key Words: phonetics, phonology, syllable, stress marking.

In the study of language, the terms like phonetics, phonology, morphology, syntax, semantics, and pragmatics are commonly used. Therefore, before entering into the intricacies of phonology, a brief discussion of all these terms will be useful to understand various aspects of language study.

- **Phonetics:** Phonetics is the study of the articulatory and acoustic properties of the sounds of human language.
- **Phonology:** Phonology is the study of how sounds are organized and used in natural languages.
- **Morphology:** Morphology is the identification, analysis and description of the structure of a given language's morphemes and other linguistic units, such as words, affixes, parts of speech, intonation/stress, or implied context.
- **Syntax:** Syntax is the study of the rules that govern the ways in which words combine to form phrases, clauses, and sentences.
- **Semantics:** Semantics is the study of meaning that is used to understand human expression through language.
- **Pragmatics:** Pragmatics is the study of the ways, in which context contributes to meaning. It includes speech act theory, conversational implicature, talk in interaction and other approaches to language behavior in philosophy, sociology, and linguistics. It studies how the transmission of meaning depends not only on the linguistic knowledge of the speaker and listener, but also on the context of the utterance, knowledge about the status of those involved, the intention of the speaker, and so on.

Differences between Phonetics and Phonology

Phonetics	Phonology
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Phonetics deals with the physical production of the sounds.	Phonology deals with the sound patterns and their meanings both within and across languages.
It is the basis for phonological analysis.	It is the basis for further work in morphology, syntax, discourse, and orthography design.
It analyzes the production of all human speech sounds of any language.	It analyzes the sound patterns of a particular language by determining which phonetic sounds are significant and explaining how these sounds are interpreted by the native speaker.

Organs of Speech:

The speech sounds produced by human beings are the result of a combined functioning of the speech organs. The production of sounds involves many operations. It begins with the birth of the concept in the brain which is transmitted to the speech organs through the nerves. The movements of the speech organs create sound waves which are received by the listener's ear and carried by his nervous system to his brain. The movement of the speech organs is determined by the specific sound which the speaker wants to produce. The speech organs include: larynx, pharynx, vocal cords, tongue, upper and lower lips, upper and lower teeth, alveolar ridge, hard palate, soft palate, and nose. The following diagram shows all these speech organs:

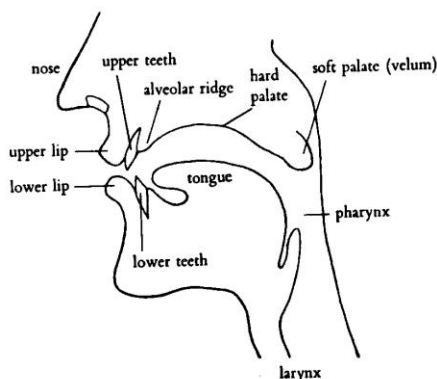


Figure -1 – Organs of Speech

The Speech Sounds: The speakers of English use 44 sounds. Out of these 44 sounds, 24 are consonants, and 20 vowels. The vowels comprise of 12 pure vowels and 8 diphthongs.

The Consonants: The following table enlists 24 consonants and their illustrations:

Sr. No.	Consonant	Examples	Sr. No.	Consonant	Examples
1.	/ p /	pet, pat, pot	13.	/ s /	see, so, sit
2.	/ b /	bet, bat, bobby	14.	/ z /	zoo, zebra, zinc

Variorum Multi-Disciplinary e-Research Journal
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3.	/ t /	ten, tap, take	15.	/ ʃ /	she, share, shine
4.	/ d /	den, dad, did	16.	/ ʒ /	vision, measure, pleasure
5.	/ k /	can, cat, care	17.	/ h /	hat, hut, hit
6.	/ g /	get, got, give	18.	/ m /	mat, meet, million
7.	/ tʃ /	chap, cheer, chair	19.	/ n /	not, neat, nation
8.	/ dʒ /	judge, job, joke	20.	/ ŋ /	king, ring, sing
9.	/ f /	fan, fast, fission	21.	/ l /	let, low, lion
10.	/ v /	van, vast, vision	22.	/ r /	rate, row, roar
11.	/ θ /	thin, thing, think	23.	/ w /	wet, wow, wear
12.	/ ð /	then, that, those	24.	/ j /	Yes, yet, yacht

The Pure Vowels: There are 12 pure vowels. These are:

Sr. No.	Vowel	Examples	Sr. No.	Vowel	Examples
1.	/ ə /	away, about, again	7.	/ ɪ /	sit, fill, nit
2.	/ ʌ /	cup, cut, but	8.	/ i: /	seat, feel, neat
3.	/ ɜ: /	girl, bird, dirt	9.	/ ʊ /	pull, full, do
4.	/ e /	get, bell, sell	10.	/ u: /	pool, fool, too
5.	/ æ /	bat, cat, mat	11.	/ ɒ /	cot, rot, hot
6.	/ ɑ: /	arm, father, bard	12.	/ ɔ: /	caught, wrought, call

The Diphthongs: In all, there are 08 diphthongs. The following table shows the list of diphthongs:

Sr. No.	Diphthong	Examples	Sr. No.	Diphthong	Examples
1.	/ eɪ /	fail, tale, sale	5.	/ aʊ /	now, cow, house
2.	/ aɪ /	file, tile, sign	6.	/ eə /	air, care, fare
3.	/ ɔɪ /	foil, coil, join	7.	/ ɪə /	bear, near, fear
4.	/ əʊ /	no, go, home	8.	/ ʊə /	poor, sure, cure

Stress Marking: English is a rhythmic language. It contains a fixed pattern of stressed and unstressed syllables. To speak English in its natural manner, it is necessary to learn which syllable receives stress and which is unstressed. Therefore, this unit is devoted to learn the terms like stress, syllable and also the rules of marking stress.

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The Syllable: Language is made up of sounds. These sounds are combined to form the words. The words are arranged in specific order to form meaningful sentences. A unit of the language which is next in the hierarchy to the speech sound is called 'syllable'. A word may contain one or more than one syllable. Therefore, a syllable is the unit of language which is higher in hierarchy than the sound or the phoneme. Syllables are made up of either only vowels or the combination of vowels and consonants. If a syllable contains only one sound, it will usually be a vowel. E.g. I, a, ah, oh, etc. If a syllable contains more than one sound, one of them will be a vowel and remaining will be consonants. E.g. The word 'boy' has one syllable which contains one consonant sound /b/ and one vowel sound /ɔɪ/. The word 'girl' has one syllable containing one vowel sound /ɜ: / and two consonant sounds /g/ and /l/. The word 'silly' has two syllables /sɪ/ and /li/. Each of these syllables contains one vowel and one consonant sound each. It means a syllable may contain one or more than one sound. Similarly a word may also contain one or more than one syllables. E.g. the words like cow, dog, hen, cat, boy, man, pin, hair, hand, sky, etc. have one syllable each. So the words having one syllable are called monosyllabic words. The words like women, Gopal, college, season, disco, naughty, beauty, etc. have two syllables each. They are called disyllabic words. The words like property, destiny, sympathy, currency, silently, specific, electric, etc. have three syllables each. They are called trisyllabic words. The words activity, regularity, conversation, nationality, punctuality, similarity, complexity, etc. have more than three syllables each. Such words are called polysyllabic words.

The syllables are put together to form the meaningful words. The words can be formed by the addition of affixes to the base of the word. The affix is a group of letters which is added at the beginning or at the end of the word to form new words. A group of letters, which is added at the beginning of the word is called prefix. E.g. the word 'discourage' is formed by the addition of 'dis-' to the word 'courage'. The word 'irregular' is made up of 'ir-' and 'regular'. In these examples 'dis-' and 'ir-' are called the prefixes. Similarly, a group of letters added at the end of the word is called suffix. E.g. the word 'courageous' is formed by the addition of '-ous' to 'courage' and the word 'regularly' is formed by the addition of '-ly' to 'regular'. Here '-ous' and '-ly' are called suffixes. The addition of these prefixes and suffixes may or may not change the meaning of the root word.

In any syllable, one sound which is more prominent than the other is usually a vowel sound. It is called 'nucleus' of the syllable. The less prominent sound is called 'marginal element' which usually comes at the beginning or at the end or at both the places of the syllable. When it comes at the beginning, it is called 'releasing consonant' and the consonant at the end is called 'arresting consonant'. For example, the word 'bat' contains one syllable /bæt/. In this syllable, /æ/ is the nucleus, /b/ is the releasing consonant and /t/ is the arresting consonant. However, there are also syllables in which consonant takes the nucleus position. Such consonants are called syllabic consonants. For example, the word 'sudden' has two syllables - /sʌ/ and /dn/. In the syllable /dn/, /n/ is prominent consonant. So /n/ is the nucleus in this syllable.

Stress: Its Meaning: The degree of force with which a speaker pronounces a sound or a syllable is called stress or accent. It is an important feature of English language. Degrees of stress usually are taken by the listeners as degrees of loudness. All the syllables of the words having more than one syllable are not pronounced with the same degree of force. The syllables which are more prominent than the others are pronounced a little loudly and so they are said to receive the stress. Less prominent syllables are called unstressed syllables. The stressed syllable is little longer than the others. For example, in the word 'again', there are two syllables - /ə/ and /geɪn/. The syllable /ə/ is weak and so it is unstressed, whereas the syllable /geɪn/ is prominent and so it receives the stress. The stress is usually shown with the stroke at the head of the syllable. E.g.

1.	again	/ə 'geɪn/
2.	judgement	/'dʒʌdʒmənt/
3.	decide	/dɪ'saɪd/
4.	become	/bɪ'kʌm/

Primary Stress and Secondary Stress: There are two degrees of stress – primary and secondary. In any word having two or more syllables, the most prominent syllable receives the strongest stress. This stress is called primary stress. The remaining syllables of this word may be stressed or unstressed. When some other syllable of that word is also prominent but not as prominent as the first one, then it is also slightly stressed. It is called secondary stress. The primary stress is marked with a stroke at the head of the syllable and the secondary syllable is marked with the stroke at the foot of the syllable. E.g.

1.	activity	/æktɪvə'tɪ/
2.	recognition	/rɪkə'gnɪʃn/
3.	cultivation	/kʌltɪ'veɪʃn/
4.	examination	/ɪgzæmɪ'neɪʃn/
5.	qualification	/kwɒlɪfɪ'keɪʃn/

Grammatical Stress: In English, there are certain words in which the stress changes according to the grammatical form of a word. E.g. the nouns and adjectives receive stress on their first syllable, whereas the verbs receive the stress on their second syllable. Such kind of change in the place of the stress helps us to recognize whether the word is noun, adjective or the verb. E.g.

1.	subject (N)	/'sʌbdʒekt/
	subject (V)	/sbɪ'dʒekt/
2.	object (N)	/'ɒbdʒekt/

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Vol.,-02, Issue-I, August 2011

	object (V)	/ əb'dʒekt/
3.	record (N)	/rɪkɔ:d/
	record (V)	/rekɔ:d/
4.	increase (N)	/ɪnkri: ʒ/
	increase (V)	/ɪnkri: ʒ/
5.	conduct (N)	/kʌndəkt/
	conduct (V)	/kɒndəkt/

Stress Change: The stress is usually fixed on certain syllable of the word. However, it can change as per the intention of the speaker and the circumstance in which it is used. Therefore, sometimes one syllable will receive the stress and at the other, some other syllable will be stressed. Naturally, in some cases the meaningful words will lose the stress and other less meaningful words will receive it. This is called stress change. It is observed that the words with the same stem do not keep the primary stress on the same syllable. It goes on changing its place from one syllable to the other. E.g

1.	a'cademy	aca'demic	acade'mician
2.	'politics	po'litical	po'litician
3.	bac'teria	bacteri'ology	bacterio'logical
4.	'democrat	de'mocracy	demo'cratic
5.	'photograph	pho'tography	photo'graphic

Rules For Stress Marking: Stress within a word is called word-stress. The words in English generally follow certain rules of stress marking. These rules are:

1. The words belonging to the class of Noun, Verb, adjective and Adverb are usually stressed. If there is only one syllable in such words, there is no need to indicate the stress with the stroke. Eg. The words boy, girl, come, shine, black, blue, quite, well, etc. have only one syllable in each of them. Therefore, there is no need to show the stress in these words.
2. Words beginning with weak syllable are stressed on the second syllable. E.g.

ar'rive	a'loud
ad'mit	a'lone
a'broad	a'gain
be'low	be'tween
com'pose	re'duce

3. Words ending in '-ic', '-ical', '-ically', '-ity', '-ial', '-ially', '-ious', '-ian' receive the primary stress on the syllable preceding the suffix. Eg.

Variorum Multi-Disciplinary e-Research Journal
Vol.,-02, Issue-I, August 2011

e'lectric	patri'otic
e'lectrical	gram'matical
po'litically	gram'matically
ac'tivity	curi'osity
arti'ficial	confi'dential
arti'ficially	confi'dentially
'anxious	in'dustrious
elec'trician	mu'sician

4. Words ending in '-ion' receive the primary stress on the last syllable but one. For example:

reali'zation	conceptuali'zation
stabili'zation	industriali'zation
conver'sation	intro'duction
appli'cation	compo'sition
civili'zation	culti'vation

5. The words having more than two syllables and ending in '-ate' receive the primary stress on two syllables before the suffix. For example:

'separate	'fortunate
'cultivate	'educate
'complicate	'rusticate
e'liminate	'estimate
'perpetuate	'saturate
'graduate	e'radicate
'punctuate	'subjugate
e'vaporate	'integrate

6. The words ending in '-eer', '-aire', '-ental', '-ential', '-ique', '-esque', '-itis', and '-escence' receive their primary stress on their suffix's first syllable. For example:

ca'reer	engi'neer
millio'naire	billio'naire
continental	fundamental
refe'rential	exis'tential
bou'tique	phy'sique
gro'tesque	neuri'tis

Variorum Multi-Disciplinary e-Research Journal
Vol.,-02, Issue-I, August 2011

effer'vescence

7. The suffixes, '-es', '-ing', '-ed', '-en', '-age', '-ance', '-er', '-ess', '-ful', '-fy', '-hood', '-ice', '-ist', '-ive', '-less', '-ly', '-ment', '-ness', '-ship', '-ter', '-ure', and '-zen' do not affect the place of the stress. For example:

'reaches	'reaching
'reached	'given
'shortage	'tolerance
'sharper	'poetess
'beautiful	'signify
'childhood	'service
'careless	'nicely
'development	'coldness
'friendship	'quitter
'failure	'citizen

8. The words ending with the suffixes '-al' and '-ally' change the stress pattern. For example:

accident	accidental	accidentally
economic	economical	economically
politic	political	politically
electric	electrical	electrically

Sentence Stress: As all the syllables of a word are not prominent and so are not stressed, similarly not all the words of a sentence are important and so not all of them are stressed. The words of a sentence which are semantically important are usually stressed. These words are called content words. They are nouns, verbs, adjectives, adverbs, and demonstrative pronouns. For example, in the sentence 'Ram and Sham drink the milk' the words 'Ram', 'Sham' and 'milk' are nouns and the word 'drink' is a verb. All these are content words. So they are stressed.

The words of a sentence which express the relations between the content words are called structure words and they are generally unstressed. For example, in the sentence 'Gopal is sitting on the chair', the word 'on' refers to the relation between 'sitting' and 'chair'. Hence it is unstressed. Articles, prepositions, conjunctions, interjections, and auxiliary verbs are relatively less important elements of a sentence. Therefore they are generally unstressed.

Bibliography

1. O'Connor, J.D. 1980. *Better English Pronunciation*. Delhi: Cambridge University Press
2. Bansal, R.K. & Harrison, J.B. 1983. *Spoken English for India*. Sangam Books Ltd.
3. Hornsby, A.S. 2005. *Oxford Advanced Learners' Dictionary*. Oxford University Press.
4. <http://en.wikipedia.org>
5. <http://reference.yourdictionary.com>
6. <http://en.wikipedia.org>
7. <http://reference.yourdictionary.com>
8. <http://www.sil.org>